

In the Claims:

Please amend claims 1, 17-21, and 23 as indicated below.

Sub G1 1. (Four Times Amended) A device for inducing local bone or cartilage formation, comprising:

[an] a purified osteogenic protein capable of inducing repair of endochondral bone, or cartilage, chondral, or osteochondral defects; a [non-synthetic, non-polymeric] matrix other than a synthetic polymer or [other than] demineralized bone; and a binding agent.

Sub G3 17. (Amended) A device for inducing local bone or cartilage formation, comprising at least approximately 1.25 mg of OP-1 and at least approximately 180 mg of carboxymethylcellulose per 1000mg of collagen matrix [osteogenic protein OP-1, approximately at least 1.25 mg; collagen matrix, approximately 1000 mg; and carboxymethylcellulose, approximately at least 180 mg].

18. (Amended) The device of claim 17 [further] comprising [OP-1, approximately] at least approximately 2.5 mg of OP-1 per 1000 mg of collagen matrix.

E2 19. (Amended) The device of claim 17 or 18 [further] comprising [carboxymethylcellulose, approximately] at least approximately 200 mg of carboxymethylcellulose per 1000 mg of collagen matrix.

Sub G4 20. (Thrice Amended) A device for inducing local cartilage or bone formation comprising [an] a purified osteogenic protein capable of inducing repair of endochondral bone, or cartilage, chondral, or osteochondral defects and a carrier, wherein said carrier comprises one part [(w/w)] binding agent and 10 or fewer parts (w/w) matrix.

E1

Subj 21. (Twice Amended) The device of claim 20 wherein said carrier comprises one part [(w/w)] binding agent and 5 parts (w/w) matrix.

E2

Subj 5 23. (Thrice Amended) A device for inducing local bone or cartilage formation comprising [an] a purified osteogenic protein capable of inducing repair of endochondral bone, or cartilage, chondral, or osteochondral defects and a carrier, wherein said carrier comprises 10 or fewer parts (w/w) binding agent and 1 part [(w/w)] matrix.

REMARKS

Claims 1-25, 31-33, 35, and 36 are pending in this application.¹ Of these, claims 1, 17-21, and 23 have been amended to promote clarity and to further define the scope of the invention.

In particular, claim 1 is amended to specify that the recited matrix is not a synthetic polymer; support for this amendment appears in the specification at page 4, lines 7-11, and page 7, lines 6-9.

Claim 1, 20, and 23 are amended to specify that the recited osteogenic protein is a purified protein, i.e., a protein purified away from osteogenic contaminants naturally associated with this protein. Such contaminants typically are other osteogenic proteins co-existing in bone extracts. Purified osteogenic proteins can be made by recombinant or synthetic methods; support for such proteins appear throughout the specification. See, e.g., page 40, lines 10 and 19-22.

Support for the remaining claim amendments appear in the respective claims as originally filed. Applicants have also amended the specification to correct a typographical error. None of the above amendments introduces any new matter.

Formal Matter Objections

Claims 7 and 8 are objected to as being of improper dependent form.

1 The Office Action Summary mistakenly indicated that claim 31 was not pending.